Claims

1. A test strip system, including at least one test strip (18) with a test field (30) and a measuring device (10) for measuring the test field and having a strip receiver (16) having a support surface (26) for the test strip and positioning means by which the test strip after its insertion into the strip receiver is so held that at least a section of the test strip containing the test field takes on a definite position relative to the support surface (26), characterized in that the test strip (18) is pressed by a spring force directed parallel to the support surface against an abutment (66) of the strip receiver (16).

2. A test strip system according to Claim 1, further characterized in that the spring force is created by an elastic deformation of the test strip upon its insertion into the strip receiver (16).

3. A test strip system, according to Claim 2, further characterized in that the test strip (18) has a recess (58;70;74) near at least one of its edges and that the contour of a material bridge (60;72;76) bordering the recess (58;70;74) and/or of boundary surfaces (54;56) facing the recess is so-chosen that the material bridge (60;72;76) upon insertion of the test strip (18) into the strip receiver (16) is deformed.

4. A test strip system according to Claim 3, further characterized in that on the test strip receiver (16) or on the material bridge (60;76) is formed a projection (62; 78) for engagement with the material bridge or with a boundary surface of the strip receiver.

5. A test strip system according to Claim 4, further characterized in that on the material bridge (76) or on the strip receiver (16) is formed a recess (80) associated with the projection (78) for partially receiving the projection (78).

6. A test strip system according to Claim 1, further characterized in that a spring (82) is arranged in the strip receiver (16) which spring presses the test strip (18) in the strip receiver (16) against the abutment (86).

7. A test strip system according to Claim 6, further characterized in that the spring (82) is so arranged that its spring force is directed in the direction of pushing the test strip (18) out of the strip receiver (16).

8. A test strip system according to Claim 6, further characterized in that the abutment has at least one arresting element (86) intended for reception in a recess (84) of the test strip (18).

9. A test strip system according to Claim 8, further characterized in that the arresting element (86) is adjustable between an inserted position and a freeing position.

10. A test strip system according to Claim 9, further characterized in that the arresting element is biased toward its inserted position.

11. A test field system, including at least one test strip (18) with a test field of (30), and a measuring device for measuring the test field and having a test strip receiver (16), which test strip receiver has a support surface (26) for the test strip and positioning means for holding the test strip (18) inserted in the strip receiver (16) so that at least a section of the test strip containing the test field (30) is held in a definite position relative to the support surface (26), characterized in that the strip receiver (16) has two holding means (88;96;98) spaced from one another on edge areas of the support surface (26) for holding fast associated edges of the test strip (18), and in that the support surface (26) in the middle area between the holding means (88;96;98) is vertically displaced from the edge areas.

12. A test strip system, according to Claim 11, further characterized in that the support surface (26) in said middle area has a projection (94) supporting the test field (30) of the test strip (18).

13. A test strip system, including at least one test strip (18) with a test field (30), and a measuring device (10) for measuring the test field and having a strip receiver (16) having a support surface (26) for the test strip and positioning means, whereby the test strip (18) inserted into the strip receiver is so held that at least one section of the test strip containing the test field (30) is held at a definite position relative to the support surface (26),

characterized in that the test strip receiver (16) has an outer insertion end and an inner end, that near said inner end a spring arm (34) is arranged which spring arm rises from the support surface (26) toward the inner end of the strip receiver and is elastically deflectable in the direction toward the support surface (26) and that a counter-pressure surface (36) is associated with the spring arm (34) in a spacing from the support surface (26) which counter-pressure surface extends upwardly and rearwardly from the support surface (26) toward the inner end of the strip receiver generally parallel to the direction of the spring arm (34).

14. A test strip system according to Claim 13 , further characterized in that on the spring arm (34) is formed a detent projection (40) for reception in a detent recess (38).

15. A test strip system including at least a test strip (18) with a test field of (30), and a measuring device (10) for measuring the test strip, the measuring device having a test strip receiver (16) having a support surface (26) for the test strip (18) and positioning means for so holding the test strip (18) inserted in the strip receiver (16) that at least a portion of the test strip (18) containing the test field (30) assumes a definite position relative to the support surface (26), characterized in that above the support surface (26) a pivotal clamping lever (46) is supported for a moment about an axis parallel to the support surface, which clamping lever has a clamping arm (48) biased toward the support surface (26).

16. A test strip system according to Claim 15, further characterized in that the clamping arm (48) has a detent projection (52) intended for reception in a detent recess (38) of the test strip (18).

17. A test strip system according to Claim 15, further characterized in that the clamping arm (48) of the clamping lever (46) is connected with a second lever arm forming an actuating arm (50) against which a spring (34) works and biases the clamping arm (48) toward the support surface (26).

18. A test strip system according to Claim 1, further characterized in that the strip receiver (16) is formed as a separate element which is insertable into a housing (12,14) of the measuring device.

19. A test strip system according to Claim 15, further characterized in that a flat groove (47) for guiding the test strip (18) is formed in the surface of the clamping arm (48) of the clamping lever (46) which faces the support surface (26).

20. A test strip system according to Claim 19, further characterized in that groove (47) bordering edge flanges (49) of the claming arm are received in complementary groove shaped recesses (51) in the support surface (26) in the clamping position of the clamping lever (46).

21. A test strip according to Claim 1, further characterized in that the measuring device (10) has a measuring optic (22) for optically measuring the test field, which measuring optic (22) is arranged below a measuring opening (28) in the support surface (26) for the test strip (18).

22. A test strip system including at least a test strip (18) with a test field (30) and a measuring device for measuring the test field, the measuring device having a strip receiver (16) having a support surface (26) for the test strip (18) and positioning means for holding the inserted test strip (18) in the strip receiver (16) so that at least a section of the test strip (18) containing the test field (30) assumes a definite position relative to the support surface (26), characterized in that the measuring device (10) and the test strip (18) have contact elements (100) on the measuring device and on the test strip for electrically measuring the test field (30), and in that at least one contact element (100) on the measuring device is formed as a clamping spring which biases the test strip (18) in the measuring position of the test strip against the support surface (26).

23. A test strip system according to Claim 22, further characterized in that an actuating lever (46) pivotal about an axis (44) parallel to the support surface (26) is so connected with at least one contact spring (100) that the contact spring (100) by pivoting of the actuating lever (46) is liftable from the support surface (26).